



## TRANSACTIONS ON PLASMA SCIENCE

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Editor

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### ANNUAL REPORT FOR 2003

This report follows the formats used in prior years. First, there is a summary and discussion of major events and journal statistics. The detailed statistical portion follows, giving the status and accomplishments of TPS during this year. The report ends with an estimated budget for 2004.

### HIGHLIGHTS

- Print delay problems experienced in previous years were mainly resolved this year – four out of six issues were published on schedule
- TPS is on the World Wide Web – the latest Table of Contents on IEEE's Web site, full text search & PDF (1988-2003) on IEEE's Xplore & TPS's own web site at <http://www.ieeetps.org>
- IEEE's Manuscript Central system is now being successfully used for new and revised MS submissions, and for review of these MSs by the Editor and all Special Issue Guest Editors
- Electronic publishing has definitely arrived with 100% of TPS's final MSs submitted in electronic form
- TPS pages have decreased somewhat with 1476 pages and only four Special Issues this year vs. 2136 pages and five Special Issues last year
- Months-to-publication increased slightly: 10.1 months (2003) vs. 9.5 months (2002)
- Overall paper acceptance rate this year is 68% (2003) compared with 88% (2002)
- Regular paper acceptance rate is now at 54% down a bit from 65% last year
- Regular MSs are arriving at a rate of 9.4/month up slightly from 9.1/month last year
- Page charge collection rate is down this year at 59% vs. 71% last year

### DISCUSSION

This is the twelfth full year in which TPS has provided authors with the option to submit finished manuscripts in electronic form. We have received MSs via floppy disks, ZIP disks, CDs and electronic mail. This year's statistics show, as we had achieved in the last three years as well, a remarkable 100% (176 out of 176) of the published MSs were submitted in electronic form. In addition to our Tables of Contents, search

capabilities, and full PDF MSs available via IEEE's Xplore (<http://ieeexplore.ieee.org>), we also updated TPS's web site, launched in early 2000 (check it out at: <http://www.ieetps.org>), by adding upcoming Special Issue announcements with links to their respective web pages, historical data on Special Issues back to 1994, a link to the current IEEE Copyright form, and our Page Charge Questionnaire.

During the period covered by this report, TPS has experienced a decrease in pages published (1476 pages for 2003 versus 2104 pages for 2002). This number of pages is more than 5% below that budgeted. The decrease was due to four Special Issues published this year compared to the five published last year (one originally scheduled for 2003 was rescheduled for 2004).

A slight increase in months to publication was noted this year (10.1 months for 2003 versus 9.5 months for 2002). To address the matter of timely publication, I continue to send deadline reminders and summaries of the Special Issue manuscript status, to all the Guest Editors during the course of the review process for all Special Issues. I continue to use FAX, Federal Express, and electronic mail to speed along the process.

Beginning in October 2002, the Transactions began using IEEE's Manuscript Central for MS submission and review. An Editorial, formally launching Manuscript Central, was published in the April 2003 TPS issue. The current experience is that the system is fairly easy to use for authors, reviewers, Guest Editors, and the Editor. The hope that Manuscript Central would help improve the speed of the review process has been fulfilled. The additional hope, that the speed of publication would also improve, will be further assessed in 2004 when we will have all the Special and Regular Issue papers processed through Manuscript Central.

This year, we published four excellent Special Issues on:

**Feb '03 -- Plenary & Invited Papers from ICOPS 2002 (Clarence Capjack, Guest Editor);**  
**Aug '03 -- Modeling & Simulation of Collisional or Near-Collisionless Low Temperature Plasmas (Demetre Economou, Meyya Meyyappan, & Toshiaki Makabe, co-Guest Editors);**  
**Oct '03 -- Vacuum Discharge Plasmas (Kenneth Struve, Guest Editor);**  
**Dec '03 -- Space & Cosmic Plasmas (Anthony Peratt & Karl-Gunne Falthammar, co-Guest Editors).**

The Guest Editors are to be commended on their hard work in assembling these fine Special Issues. The plasma science community as a whole definitely benefits from such Issues, bringing together cutting edge research in a single volume. The hope is that by Guest Editors using Manuscript Central, their jobs will be easier, and the finished Special Issues will be published in a more timely fashion.

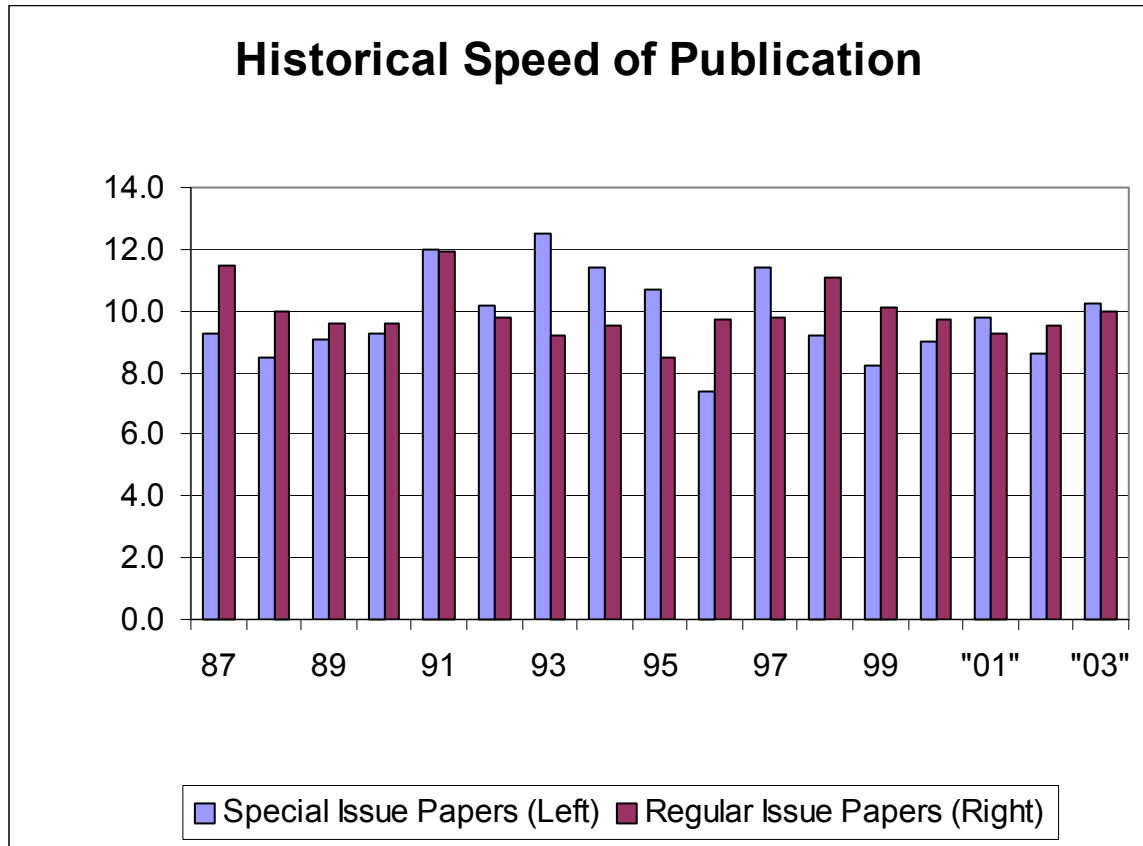
Keeping TPS running smoothly is also due to the efforts of dedicated staff at IEEE Headquarters in Piscataway, New Jersey. Managing Editor Jeff Cichocki and Associate Editor Meredith Lockard are daily working with Editor and Guest Editors, authors, and vendors to assure on-time publication status for all our TPS issues.

I continue to request input from readers, authors, Associate Editors and friends of TPS in the following areas: Special Issue subjects, Guest Editor nominations, Associate Editor nominations, review paper topics and authors, and contributed MSs. It is through the efforts of the many members of the Plasma Science Community that the TPS will continue to improve in quality, timeliness and financial viability to meet the changing needs of our profession.

## JOURNAL STATISTICS

**I. Speed of Publication** - defined as the number of months elapsed from first submission of MS until the date listed on the TPS issue:

10.0 months (Reg Issue Papers), 10.1 months (Sp Issue Papers), 10.1 months (all papers)

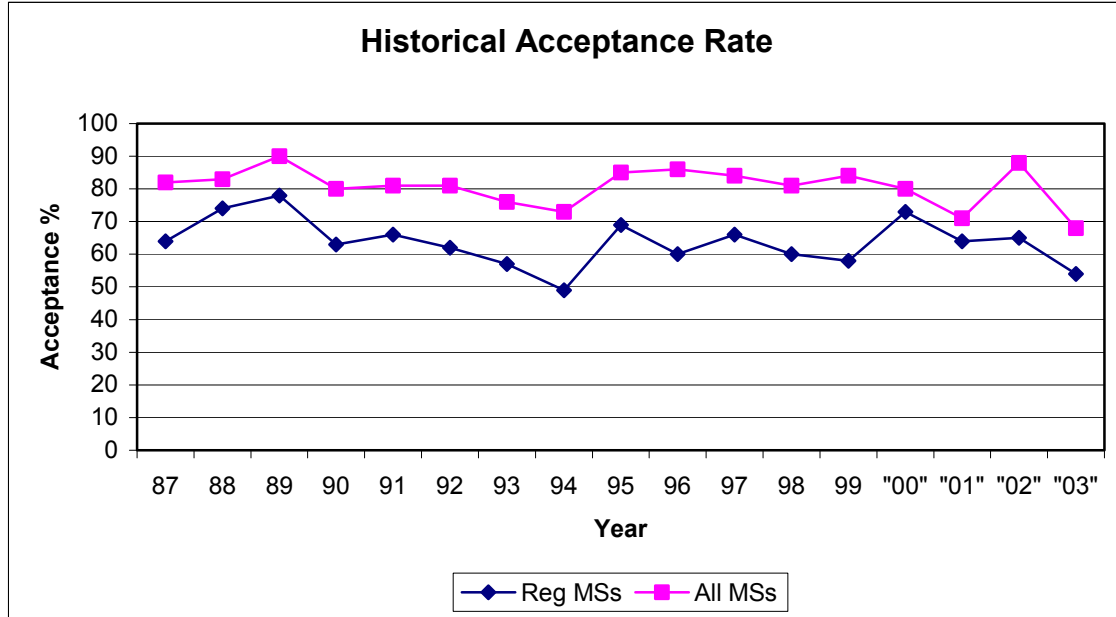


## II. Paper Acceptance Statistics (10/1/02 to 9/30/03 plus all Special Issue MSs published in 2003) - Sample size 233 papers

Accepted - 149, Rejected - 70, Pending - 11, Withdrawn - 3, Not Germane - 0

Acceptance Percentage = 54% for Regular Issue Papers

Acceptance Percentage = 68% for all papers



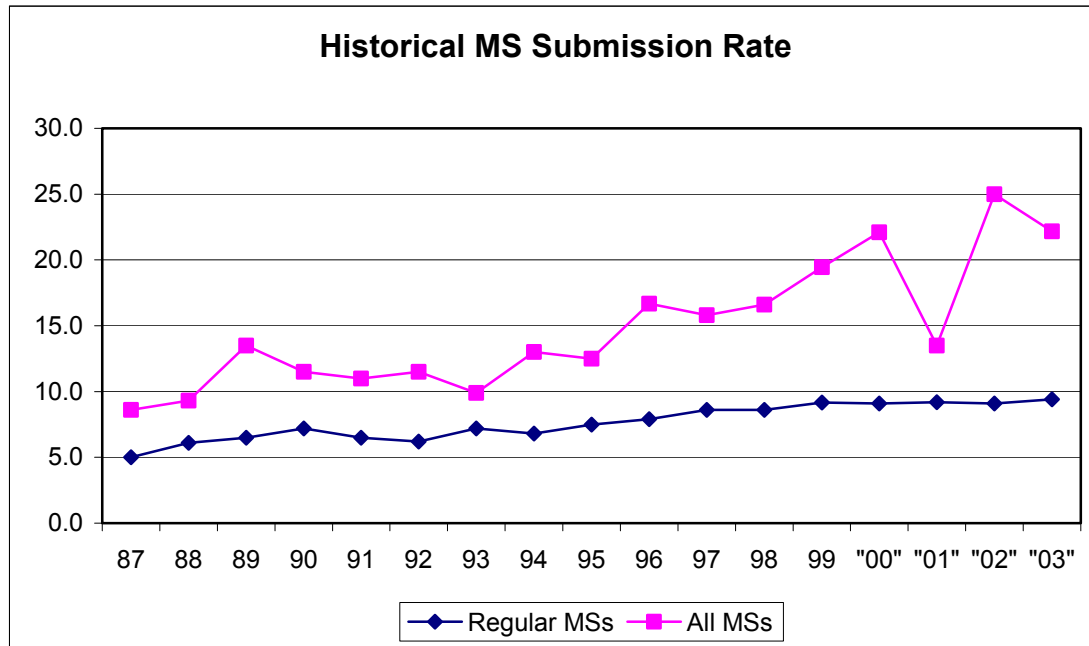
## III. Publication Statistics

# = Special Issue

\* = Estimated

Issue	Papers	Tot pgs	Paid pgs	Ed pgs	Fill pgs	Index	MSs electr
Feb '03#	24	244	120	9	3	48	24
Apr '03	19	128	75	5	0		19
Jun '03	18	160	93	5	1		18
Aug '03#	37	344	223	6	1		37
Oct '03#	46	320	181	5	4		46
Dec '03#*	32	280	177	?	?		32
TOTALS	176	1476	869	30	9	48	176
Totals '03	176	1476	869	30	9	48	176
Totals '02	344	2104	1499	8	4	0	344
Totals '01	144	973	623	18	2	69	144
Totals '00	286	2287	1601	40	12	0	285
Totals '99	263	1648	868	25	12	34	263
Totals '98	204	1720	1169	8	5	20	204
Totals '97	189	1480	1001	13	2		172
Totals '96	216	1457	867	17	4		202
Totals '95	133	1064	596	19	6		127
Totals '94	132	1105	745	11	12		118
Totals '93	117	781	423	11	7		101
Totals '92	143	1011	780	9	3		82
Totals '91	154	1272	883	13	3		84

#### IV. Submission of MSs (MSs per month versus Year)



#### V. Scheduled Special Topic Issues

2004 ...

- |          |  |
|----------|--|
| Feb 2004 | <i>Special Issue on Plenary and Invited papers from ICOPS-2003</i> -- Guest Editor: Sang Hee Hong  |
| Feb 2004 | <i>Special Issue on Pseudospark Physics and Applications</i> – Guest Editors: Martin Gundersen & Werner Hartmann   |
| Apr 2004 | <i>Special Issue on Physics of Dusty Plasmas</i> – Guest Editors: Alexei Ivlev, André Melzer, Wayne A. Scales & Edward Thomas, Jr.   |
| Apr 2004 | <i>Special Issue of Selected Contributed Oral Papers from ICOPS 2003</i> – Guest Editors: Shigeru Sudo, Hiroshi Fujiyama, Han-Sup Uhm, [Lead Guest Editor ], Jin Joo Choi, Yong Seok Hwang, Mark Kushner. Wesley Lawson, Frank Hegeler, Paul K. Chu, Ian Brown |
| Jun 2004 | <i>Special Issue on High Power Microwave Generation</i> – Guest Editors: Monica Blank & David Abe  |

- Aug 2004      *Special Issue on Effects of Space Weather on Technology Infrastructure* – Guest Editors: Ioannis A. Daglis, Daniel N. Baker & K. Koutroumbas
- Aug 2004      *Special Issue on Nonthermal Medical/Biological Applications of Ionized Gases and Electromagnetic Fields* – Guest Editors: Ravindra P. Joshi, Walter R. Rogers & Andrei Pakhomov
- Oct 2004      *Special Issue on Pulsed Power Science and Technology* – Guest Editors: James Dickens, John Mankowski, & Jane Lehr
- 2005 ...**
- Feb 2005      *Special Issue on Plenary and Invited papers from ICOPS-2004* -- Guest Editor: TBA
- Feb 2005      *Special Issue of Images in Plasma Science* – Guest Editor: Mark Kushner
- Apr 2005 (tentative) *Special Issue on Plasma Combustion* -- Guest Editor: Louis Rosocha
- Oct 2005      *Special Issue on Vacuum Discharge Plasmas* – Guest Editor: TBA
- 2006 ...**
- Feb 2006      *Special Issue on Plenary and Invited papers from ICOPS-2005* -- Guest Editor: TBA
- Apr 2006 (tentative)      *Special Issue on Space & Cosmic Plasmas* – Guest Editor: Anthony Peratt

## VI. Transactions on Plasma Science - 2004 Budget

Page Budget Estimate (includes covers & index)

Feb	2004 (Special Issue) .....	288	pages
Apr	2004 (Special Issue) .....	892	pages
Jun	2004 (Special Issue) .....	638	pages
Aug	2004 (Special Issue) .....	592	pages
Oct	2004 (Special Issue) .....	488	pages
Dec	2004 (Regular Issue) .....	124	pages

Total Page Budget 2004 ..... 3022 pages

Income & Expenses (See IEEE historical budget printout – attached)

2004 TPS Estimated Income           \$535.6K  
2004 TPS Estimated Expenses       \$502.0K  
2004 TPS Estimated Surplus (Loss) \$033.5K



Respectfully Submitted

Steven J. Gitomer, Editor, IEEE TPS

Date: 07 January 2004

**2004 IEEE S/C BUDGET  
FOR THE PERIOD ENDING DECEMBER 31, 2004**

07-Jan-04

03:56 PM

1/7/04

BUSINESS UNIT - 0050 NUCLEAR AND PLASMA SCIENCES SOCIETY - DIVISION IV  
COST CENTER - 00281 TRANS. ON PLASMA SCIENCE

	ACCOUNT NUMBER	PRIOR YEAR ACTUALS						2003 BUDGET	2004 BUDGET
		1997 ACTUALS	1998 ACTUALS	1999 ACTUALS	2000 ACTUALS	2001 ACTUALS	2002 ACTUALS		
S/C Fees Hard Copy	3018000000	12.6	13.0	9.5	10.9	7.5	12.7	21.9	35.0
S/C Fees Micro Fiche	3018100000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S/C Electronic	3018400000	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.1
S/C Package (Print & Electronic)	3018500000	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.4
Subscriptions - NM Individual	3202000000	65.6	72.0	72.6	74.3	83.8	112.1	110.6	72.7
Subscriptions - APP/IEL/MDL	3205000000	135.1	168.3	186.7	0.0	141.1	288.0	305.3	353.8
IEL			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Airfreight Charges Billed to Members	3251000000	3.0	6.8	0.2	2.0	4.3	1.4	6.8	7.0
Voluntary Page Charges	3310000000	52.5	54.7	60.9	32.3	63.3	38.3	64.6	38.3
Overlength Page Charges	3311000000	23.5	73.9	62.7	39.0	57.8	26.3	56.8	26.3
<b>Total Income</b>		<b>292.3</b>	<b>388.7</b>	<b>392.6</b>	<b>158.5</b>	<b>357.8</b>	<b>480.0</b>	<b>565.9</b>	<b>535.6</b>
2nd Class - Edit US	4201500000	3.2	5.0	4.3	4.7	1.9	2.4	4.2	2.8
2nd Class - Edit Non US	4202500000	6.8	7.4	8.2	13.9	6.5	13.7	15.7	15.8
Freight & Other	4205500000	1.8	5.3	2.0	2.7	1.1	2.0	3.4	2.0
Air Freight	4206500000	3.8	3.6	1.9	2.3	1.6	0.4	2.9	2.9
Text Paper	4553000000	13.3	15.1	13.8	18.4	11.1	18.0	18.9	25.5
Press Work Print	4581000000	21.4	18.0	12.0	29.7	18.6	61.4	32.1	80.9
Binding Prt Ed	4582000000	1.5	4.4	2.5	3.2	2.1	5.0	3.5	6.7
Mailing Prt Ed	4583000000	1.7	3.6	3.8	6.0	3.1	3.4	6.5	4.5
<b>Total Printing Expense</b>		<b>53.5</b>	<b>62.4</b>	<b>48.5</b>	<b>80.9</b>	<b>46.0</b>	<b>106.3</b>	<b>87.1</b>	<b>141.1</b>
Sal-Temp 2	4006000000	0.0	0.0	0.0	0.0	12.2	15.9	15.3	15.6
Copyright Filing Fees	4144000000	0.1	0.0	0.0	0.2	0.1	0.1	0.0	0.0
Bad Debt Allowance	4146000000	(1.9)	(1.7)	0.0	0.0	1.1	(1.1)	0.0	0.0
Manuscript Central	45130PERRV	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Express Carriers	4205000000	0.0	0.0	0.1	0.0	0.5	0.0	0.0	0.0
Camera Work-Print	4561000000	4.2	0.0	0.0	0.0	7.1	25.9	0.0	34.6
Editor Fee	4513000000	7.2	12.5	14.2	4.7	1.2	0.0	0.0	0.0
Editorial Headquarters	4514000000	0.0	0.0	(13.1)	0.0	0.0	0.0	0.0	0.0
Editorial Reimbursed Expense	4515000000	12.5	5.9	10.2	14.4	3.8	7.0	6.3	4.0
Composition	4521500000	60.2	67.8	79.4	82.9	29.5	69.2	63.8	65.1
Reprinting-Prt Ed (Color Graphics Re	4584000000	0.0	0.0	(13.3)	(2.3)	(11.8)	(50.1)	0.0	0.0
Pursvc - Voluntary Page Charges	5003000000	7.2	9.9	13.0	3.5	14.4	7.3	10.9	7.3
Pursvc - Overlength Page Charges	5002000000	3.1	6.3	5.1	2.3	3.2	2.2	7.0	2.2
Pursvc-Editorial	5007000000	76.8	130.3	98.3	133.4	55.2	131.6	134.3	188.9
Pursvc-Indexing	5010000000	2.3	3.8	1.8	1.1	2.2	1.5	2.2	3.0
Pursvc-Pub Admin	5024000000	5.5	8.4	8.4	4.7	10.1	6.1	14.1	18.8
Pursvc-Manuscript Central	5037500000						0.2	0.0	4.5
Pursvc-Subscription Handling	5032000000	5.9	6.0	6.0	6.0	6.0	4.9	3.4	3.5
<b>Total Creation Expenses</b>		<b>183.1</b>	<b>249.2</b>	<b>210.1</b>	<b>250.9</b>	<b>134.8</b>	<b>221.2</b>	<b>257.3</b>	<b>347.5</b>
Pursvc-OPERA	50370OPERV	0.0	3.1	2.0	0.0	0.0	0.0	0.0	0.0
Pursvc-XPLORE	50370XPLOF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4
<b>Total Electronic Expenses</b>		<b>0.0</b>	<b>3.1</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>9.4</b>
Microfiche	4542000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Misc. Expense	4999000000	0.0	3.6	0.0	1.0	2.5	1.6	3.9	4.0
<b>Total Other Expense</b>		<b>0.0</b>	<b>3.6</b>	<b>0.0</b>	<b>1.0</b>	<b>2.5</b>	<b>1.6</b>	<b>3.9</b>	<b>4.0</b>
Rmb Services-MDL	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-Itel	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-BEL	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-other	6003500000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rmb Services-ASPP	60221APPIN	0.0	0.0	0.0	(183.9)	0.0	0.0	0.0	0.0
<b>Total Reimbursed Services</b>		<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(183.9)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total Expense/PurSvc/ReimbSvc</b>		<b>236.6</b>	<b>318.3</b>	<b>260.6</b>	<b>148.9</b>	<b>183.3</b>	<b>329.1</b>	<b>348.4</b>	<b>502.0</b>
<b>Total Net</b>		<b>55.7</b>	<b>70.4</b>	<b>132.0</b>	<b>9.6</b>	<b>174.5</b>	<b>150.9</b>	<b>217.5</b>	<b>33.5</b>